

City Specification

No. 432

Reference to HBFC Articles 32, 25, 9 & 12
(CCR) Title 19; CBC Ch. 10

Huntington Beach Fire Department

Standards for Tents, Canopies and Temporary Membrane Structures

Tents, canopies, and temporary membrane structures meeting the specifications indicated herein shall be in accordance with California Code of Regulations (CCR) Title 19. These provisions are regulated by the Huntington Beach Fire Code (HBFC), Article 32 and other relevant articles. The City of Huntington Beach Planning Department may have more stringent requirements than those contained herein. The Huntington Beach Fire Department is the agency responsible for conducting compliance inspections prior to granting a Fire Department permit. It is the applicant's responsibility to follow the provisions contained herein prior to erecting tents, canopies, and temporary membrane structures within the City of Huntington Beach. This specification also includes standards for portable shelters.

DEFINITIONS

For the purposes of this document, the following definitions shall apply:

- **Canopy** – A temporary structure, enclosure, or shelter constructed of fabric or pliable materials supported in any manner other than by air or the contents it protects, which is open, without side walls, or drops on 75 percent or more of the perimeter.
- **Portable Shelter** (herein referred to as a shelter) – Includes tents not exceeding 200 square feet and canopies not exceeding 400 square feet and other enclosures or temporary membrane structures, which are not subject to compliance with HBFC Article 32.
- **Temporary Structure** – Any enclosure or shelter constructed of materials as described in the HBFC and erected for a period of less than 180 days.
- **Tent** – Any temporary structure, enclosure, or shelter constructed of fabric or pliable material supported in any manner other than by air or the contents it protects.

REQUIREMENTS *(Refer to HBFC Article 32 for additional information)*

1. PERMITS AND PLOT PLANS – APPLICATION AND APPROVAL

- 1.1 Applicants requesting to erect a tent, canopy, combined portable shelters exceeding 400 square feet, or temporary membrane structures on **private property** shall contact the City of Huntington Beach Planning Department at (714) 536-5271 for City approval prior to applying for a Fire Department permit (herein referred to as a permit).

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- 1.2 Applicants requesting to erect a tent, canopy, or temporary membrane structure on **City property** shall contact the City of Huntington Beach Community Services Department for City approval (Special Event Permit) prior to applying for a Fire Department permit. This includes a review by the Specific Events Committee, which is comprised of representatives of various City departments, including the Fire Department. Through this process, the overall conditions of approval for an event are established. In order to apply for a Specific Event Permit, contact the Community Services Department at (714) 536-5486. For small events at the City beach, contact the Marine Safety Division at (714) 536-5281.
- 1.3 Once the City grants approval, a permit shall be obtained and approved for tents, canopies, and temporary membrane structures, when required. Tents exceeding 200 square feet and canopies exceeding 400 square feet require a permit for **Temporary Membrane Structures, Tents and Canopies**. The Fire Department's phone number is (714) 536-5411.
- 1.4 At the time of application, a set of plot plans, including the perimeter and area of the tent or canopy, entrances and exits, fire extinguishing appliances, required signage (i.e. No Smoking, Fire Extinguishers, Exit, etc.) locations within the tent, and features within a 50 foot radius of the tent, shall be submitted for review.
- 1.5 Once a permit is approved and received by the applicant, it shall be retained within the tent or canopy in a conspicuous location unless otherwise directed.
- 1.6 Generally, portable shelters do not require a Fire Department permit. However, each shelter, or grouping of shelters, must maintain a safe and reasonable minimum separation distance from buildings, fences, walls, property lines and other shelters by not less than 44 inches when the area of the shelters exceeds the regulated tent size (200 square feet) and canopy size (400 square feet) limitations. In situations where clearances between shelters are less than 44 inches, the sum of the total area of shelters shall be considered as one contiguous shelter. Combined shelters, without the required minimum separation distances, are considered to be tents or canopies and subject to permits, and must meet permit conditions in compliance with City Specification #432.
- 1.7 Where combined shelters are erected, the total shelter area may not exceed 5,000 square feet without including a minimum perimeter separation distance of at least 10 feet around the perimeter of the area served. Complex combined shelter installations are subject to review and approval of the Fire Chief on a case-by-case basis. (See Attachment 1)
- 1.8 Nothing within this specification is intended to supersede the minimum requirements for fire lanes (City Specification #415, *Fire Lanes Signage and Markings on Private, Residential, Commercial and Industrial Properties*).

Standards for Tents, Canopies and Temporary Membrane Structures**2. PERMITS – WHEN REQUIRED**

- 2.1 The maximum length of tent allowed, without side exits, is 200 linear feet and must be approved on a case-by-case basis. Exits should be spaced around the perimeter of the tent such that all points within the tent are 100 feet or less from an exit.
- 2.2 These standards shall apply to any temporary membrane structure, tent, or canopy in accordance with HBFC Article 32 - Temporary Membrane Structures, Tents and Canopies; Article 25 - Places of Assembly; Article 12 – Means of Egress; and the CCR Title 19. Where code sections conflict, the specific code section shall apply.
- 2.3 Temporary membrane structures, tents, and canopies shall be used for a period of not more than 180 days within any 12-month period at a single facility if permitted by the Huntington Beach Planning Official or Community Services Director. A tent or temporary membrane structure having an area in excess of 200 square feet, or any attached canopies with an aggregate area in excess of 400 square feet may be required to have an inspection for approval. Permits and approval shall be in accordance with requirements of the Fire Marshal.

3. ACCESS, LOCATION, AND PARKING *(Refer to HBFC Article 32 for additional information)*

- 3.1 Fire apparatus access shall be provided as outlined in HBFC §902.2. Access roads shall have an unobstructed width of not less than 24 feet with vertical clearance of 13 feet, 6 inches.
- 3.2 Temporary membrane structures, tents, and canopies shall not be located within 20 feet of buildings, property lines, parked vehicles, internal combustion engines, or other temporary membrane structures, tents, or canopies. For the purposes of determining required distances, support ropes and guy wires shall be considered as part of the temporary membrane structure, tent, or canopy.

Exception: Separation distance between temporary membrane structures, tents, and canopies not used for cooking is not required when the aggregate floor area does not exceed 15,000 square feet. Also, the Fire Marshal may approve tents located in or on permanent buildings provided such use does not constitute an undue hazard.

4. MAXIMUM OCCUPANCY LOAD

Occupant load requirements shall be in accordance with the provisions of Article 25 of HBFC. Occupancy Load signs shall be placed in temporary structures where the occupancy load is 50 or more persons. A separate permit for tents, canopies, and temporary membrane structures used for public assembly shall also be attained prior to occupation.

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5. SMOKING/OPEN FLAMES AND NO SMOKING SIGNS REQUIRED

- 5.1 Smoking shall **not** be permitted in any temporary membrane structure, tent, or canopy, or in any adjacent areas where hay, straw, or any other combustible materials are stored or used unless expressly approved by the Fire Marshal.
- 5.2 A sufficient amount of "No Smoking" signs shall be placed within the structures. Approved "**NO SMOKING**" signs shall be conspicuously posted including a sign placed within all tents and beneath all canopies and temporary membrane structures. A sign shall also be affixed to the exterior of the tent adjacent to the entrance access areas approximately six (6) to seven (7) feet above the ground.

For a full and complete description of requirements for constructing and maintaining temporary membrane structures, tents and canopies, consult with a member of the Huntington Beach Fire Department's Fire Prevention Division and/or review Article 32 of the HBFC.

6. MEANS OF EGRESS – EXITS *(Refer to HBFC Article 32 for additional information)*

- 6.1 Exits shall be spaced at approximately equal intervals around the perimeter of the temporary membrane structures, tents, and canopies, and shall be located such that all points are 100 feet or less from an exit.
- 6.2 Exits shall be provided in accordance with the following table:

**HBFC TABLE 3211-A
MINIMUM NUMBER OF EXITS AND EXIT WIDTHS FOR
TEMPORARY MEMBRANE STRUCTURES, TENTS AND CANOPIES***

Occupant Load	Minimum Number of Exits	Tent or Canopy Exit Opening Size	Air-supported Structure Exit Opening Size
10 to 199	2	72 in.	36 in.
200 to 499	3	72 in.	72 in.
500 to 999	4	96 in.	72 in.
1,000 to 1,999	5	120 in.	96 in.
2,000 to 2,999	6	120 in.	96 in.
Over 3,000	7	120 in.	96 in.

* The total width of means of egress in inches shall not be less than the total occupant load served by a means of egress multiplied by 0.2. Such widths of means of egress shall be divided approximately equally among the separate means of egress.

- 6.3 Exit openings from tents shall remain open unless covered by a flame-resistant curtain as follows:

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- 6.3.1 Curtains shall be free sliding on a metal support. The support shall be a minimum of eight (8) feet above the floor level at the exit. Curtains shall be so arranged that, when open, no part of the curtains obstruct the exit; and
- 6.3.2 Curtains shall be of a color or bear markings that **shall** contrast with the color of the tent.

- 6.4 **Separation of Exits** – Where two (2) or more exits are required, at least two (2) of the exits shall be placed a distance apart equal to, but not less than one-half of the length of the area served, measured in a straight line between the center of such exits. Additional exits shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available. [2001 CBC 1004.2.4]

7. EXIT DOORS

Exit doors shall swing in the direction of exit travel. To avoid hazardous pressure loss from air-supported structures, such doors shall be automatic closing against operating pressures. Opening force at the door edge shall be in accordance with the CCR T-19, Public Assembly Use.

8. MAINTENANCE OF MEANS OF EGRESS

- 8.1 The required width of exits, aisles, and passageways shall be maintained at all times to a public way.
- 8.2 Guy wires, guy ropes, and other support members shall not cross a means of egress at a height of less than eight (8) feet.
- 8.3 The exit pathway surface shall be maintained in an approved manner.

9. EXIT ILLUMINATION AND SIGNAGE

- 9.1 Exit signs shall be installed at required exit doorways and where otherwise necessary to clearly indicate the direction of egress when the exit serves an occupant load of **50 or more**.
- 9.2 Means of egress shall be illuminated with light having an intensity of not less than one (1) foot candle at floor level while the structure is occupied. Fixtures required for means of egress illumination shall be supplied from a separate circuit or source of power when occupant load exceeds more than 300.
- 9.3 Exit signs in temporary membrane structures, tents, and canopies with occupant loads of more than 100 persons shall be of an approved self-luminous type or shall be internally or externally illuminated by fixtures supplied in the following manner:
 - 9.3.1 For occupant loads of 300 or less, two separate circuits, one of which shall be separate from all other circuits, shall be provided;

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- 9.3.2 When the occupant load exceeds 300, two separate sources of power, one of which shall be an approved emergency system, shall be provided. Emergency power shall be supplied from storage batteries or on-site generator set, and the system shall be installed in accordance with the Huntington Beach Electrical Code.

10. **AISLE SPACING AND SEATING ARRANGEMENTS** *(Refer to HBFC Article 12 for additional information)*

- 10.1 Seating arrangements and aisle spacing shall be in accordance with Article 25 of the HBFC and meet the approval of the Fire Marshal.
- 10.2 For situations without fixed seats, the minimum clear aisle width shall be 36 inches where seats, tables, counters, furnishings, displays, and similar fixtures or equipment are placed on one side of the aisle only, and 44 inches when such fixtures or equipment are placed on both sides of the aisle.
- 10.3 Aisles shall terminate at a cross aisle, foyer, doorway, or vomitory. Aisles shall not have a dead-end greater than 20 feet in length.
- 10.4 When seating rows have 14 or fewer seats, the minimum clear width between rows shall not be less than 12 inches measured from the back of one seat to the nearest projection of the seat behind. The clear width shall be increased as follows:
- 10.4.1 For rows of seating served by aisles or doorways at both ends, there shall be no more than 100 seats per row. A minimum clear width of 12 inches between rows shall be increased by 0.03 inch for every additional seat beyond 14, but the minimum clear width need not exceed 22 inches.
- 10.4.2 For rows of seating served by an aisle or a doorway at one end only, the minimum clear width of 12 inches between rows shall be increased by 0.06 inch for every additional seat beyond seven (7), but the minimum clear width need not exceed 22 inches. In addition, the distance to the point where the occupant has a choice of two directions of travel to an exit shall not exceed 30 feet from the point where the occupant is seated.
- 10.5 When there are more than 300 seats, loose seats, folding chairs, or similar seating facilities that are not fixed to the floor, they shall be bonded together in groups of three (3) or more. Bonding of chairs is not required when tables are provided for dining or similar purposes.

11. **STRUCTURAL STABILITY**

Temporary membrane structures, tents, and canopies and their appurtenances shall be adequately braced and anchored to prevent weather-related collapse. Documentation of structural stability shall be furnished to the Fire Chief upon request.

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- 12.1 The fabric of the tent shall be fire resistant and approved by the Office of the California State Fire Marshal.
- 12.2 Side walls, drops, and tops of temporary membrane structures, tents, and canopies shall be composed of flame-resistant material or shall be treated with a flame retardant in an approved manner. All of the above components must bear the seal of the California State Fire Marshal indicating approved flame retardant certification. Floor coverings, bunting, combustible decorative materials and effects, including sawdust when used on floors or passageways, shall be composed of flame-resistant material or shall be treated with a flame retardant in an approved manner.
- 12.3 Portable shelters are **not** required to bear the seal of the California State Fire Marshal indicating approved flame retardant certification. However, where regulated, combined portable shelters shall be of an approved construction type and approved by the Huntington Beach Fire Department.
- 12.4 The grounds outside and adjacent to or within 30 feet of temporary membrane structures, tents, and canopies shall be kept free and clear of combustible wastes, including dumpsters. Such wastes shall be stored in approved containers until removed from the premises.
- 12.5 Temporary membrane structures, tents, and canopies shall have a permanently affixed label bearing the following information:
 - 12.5.1 Identification of temporary membrane structure, tent, or canopy, size and fabric, or material type.
 - 12.5.1.1 For flame-resistant materials, necessary information to determine compliance with this standard.
 - 12.5.1.2 For flame-retardant treated materials, the date that the temporary structure, tent, or canopy and other combustible materials were last treated with an approved flame retardant.
 - 12.5.2 The trade name and type of flame retardant utilized in the flame-retardant treatment.
 - 12.5.3 The name(s) of the person(s) and firm that applied the flame retardant.

13. FLAMMABLE OR COMBUSTIBLE LIQUIDS AND LIQUEFIED PETROLEUM GASSES (LPG)

- 13.1 Flammable-liquid-fuel equipment **shall not** be used in temporary membrane structures, tents, or canopies.

Exception: Liquid and gas-fueled vehicles and equipment used for display, competition, or demonstration may be permitted when specifically approved by the Huntington Beach Fire Department and compliant with HBFC § 2505. An

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additional permit for Liquid or Gas Fueled Vehicles or Equipment in Assembly Buildings shall also be obtained.

- 13.2 Flammable and combustible liquids shall be stored outside in an approved manner not less than 50 feet from temporary membrane structures, tents, or canopies.
- 13.3 LP-Gas containers shall be located outside and in accordance with HBFC Table 8204-A. Safety-release-valves shall be pointed away from temporary membrane structures, tents, or canopies. (*Exceptions: HBFC §8203.2.1.5 and 8203.2.1.6.*)
- 13.4 Propane cylinders may not be located inside or too close to the fabric of the tent.
- 13.5 Refueling shall be performed in an approved location not less than 20 feet from temporary membrane structures, tents, or canopies.

14. FIRE PROTECTION APPLIANCES INCLUDING PORTABLE FIRE EXTINGUISHERS

- 14.1 Minimum fire extinguisher coverage shall be provided in every temporary membrane structure, tent, or canopy as follows:
 - 14.1.1 200 to 500 square feet of floor area: one (1) 2A-10B:C fire extinguisher;
 - 14.1.2 501 to 1,000 square feet of floor area: two (2) 2A-10B:C fire extinguishers;
 - 14.1.3 Each additional 2,000 square feet of floor area or fraction thereof: one (1) 2A-10B:C fire extinguisher.
- 14.2 Fire extinguishers shall be provided for each kitchen, mess hall, power generator, or transformer location where flammable or combustible liquids are used, and in other locations in accordance with HBFC Standard 10-1.
- 14.3 At least one 40B:C type fire extinguisher shall be provided for each kitchen, mess hall, power generator, or transformer, and at locations where flammable or combustible liquids are used, stored, or dispensed.
- 14.4 Maximum travel distance to a fire extinguisher shall not be less than 75 feet from any point in the tent, canopy, or temporary membrane structure, or less if required by the HBFC or Fire Marshal.
- 14.5 Other fire appliances shall be maintained at the site as may be required by the Fire Marshal.

15. HEATING AND COOKING REQUIREMENTS

- 15.1 Cooking equipment is only permitted inside tents used exclusively for the cooking of food. No other uses such as public assembly, sales, displays, etc. are permitted.

Exception: The warming of food, cooking demonstrations, or similar activities

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where the equipment and operations involved do not present an ignition hazard as approved by the Fire Marshal.

- 15.2 Cooking equipment used in cooking tents shall be vented to the outside air by approved means. Where vents or flues are used, all portions of the tent or canopy shall be no less than 12 inches from the fuel or vent. Solid fuel burning equipment shall be equipped with a spark arrestor having an opening not exceeding $\frac{1}{4}$ inch wire mesh.
- 15.3 Tents where cooking is performed shall be separated from other temporary membrane structures, other tents, and canopies by a minimum of 20 feet.
- 15.4 Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet of a non-cooking temporary membrane structure, tent, or canopy. All other cooking equipment shall be located a minimum of ten (10) feet from temporary membrane structures, tents, and canopies.
- 15.5 Only comfort-type heating equipment is permitted. All fuel-fired comfort heating equipment shall be located on the exterior of the temporary membrane structure or tent with a minimum of 10 feet away. Heated air shall be ducted from the equipment to the temporary membrane structure or tent. Separate fuel supplies that are in use for comfort-heating equipment shall be located a minimum of 20 feet from the temporary membrane structure or tent. Stored fuel shall be located a minimum of 50 feet from the tent.
- 15.6 Heating and cooking equipment shall not be located within ten (10) feet of exits, exit pathways, tent or canopy fabric, or other combustible materials.
- 15.7 All cooking and heating equipment, tanks, piping, hoses, fittings, valves, tubing, and other related components shall be approved and in accordance with the Huntington Beach Mechanical Code.

16. HOUSEKEEPING

- 16.1 Combustible vegetation shall be removed from the area occupied by a temporary membrane structure, tent, or canopy, and from areas within 30 feet of such a structure.
- 16.2 Hay, straw, trash bins, waste material, and similar combustible materials shall not be stored inside or within 30 feet of a temporary membrane structure, tent, or canopy being used for cooking or public assembly.

Exception: Hay, straw, and similar combustibles treated with a flame retardant in an approved manner.

APPROVED: _____
Duane S. Olson, Fire Chief

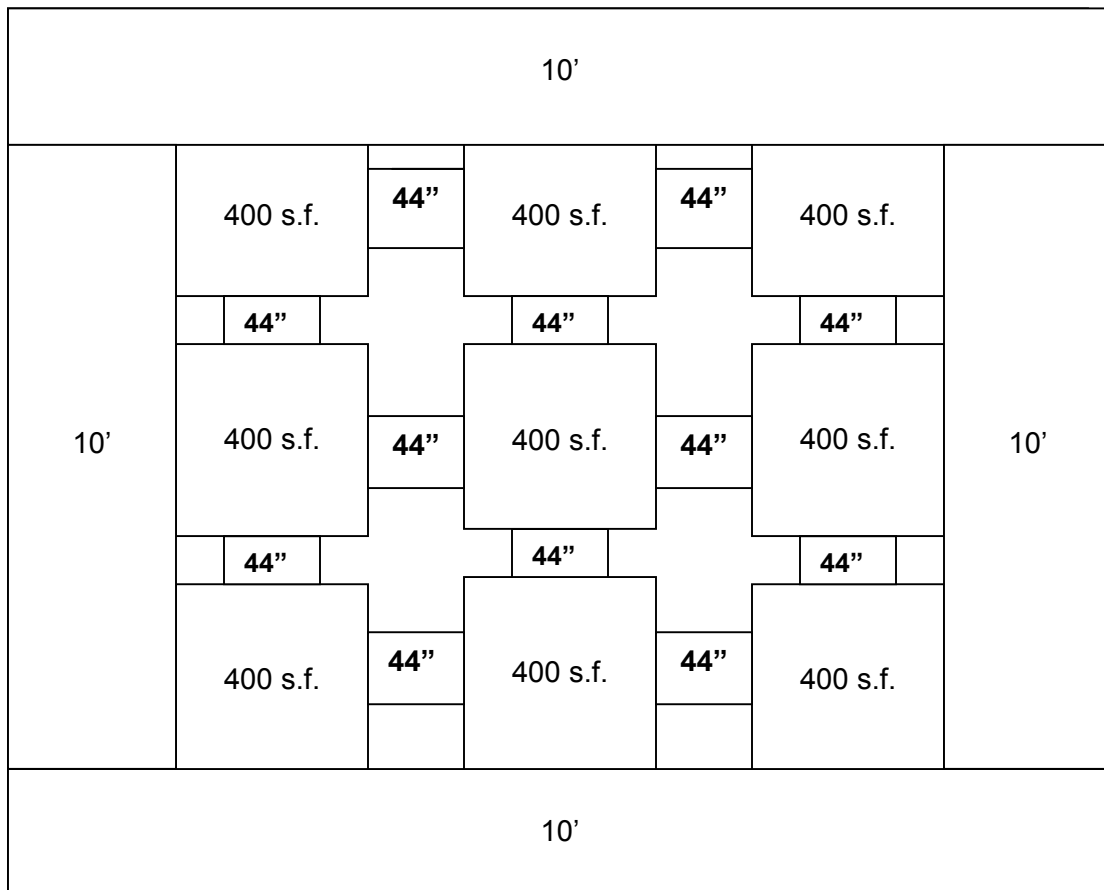
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ATTACHMENT 1

Maximum Area Density For Combined Portable Shelter Groupings

Example of a Combined Portable Shelter Grouping



Groupings of shelters must maintain a safe and reasonable minimum separation distance from buildings, fences, walls, property lines and other shelters by not less than 44 inches when the area of the shelters exceeds the regulated tent size (200 s.f.) and canopy size (400 s.f.) limitations.

Where combined shelters are erected, the total shelter area may not exceed 5,000 s. f. without including a minimum perimeter separation distance of at least 10 feet around the perimeter of the area served.

Complex combined shelter installations are subject to review and approval of the Fire Chief on a case-by-case basis.